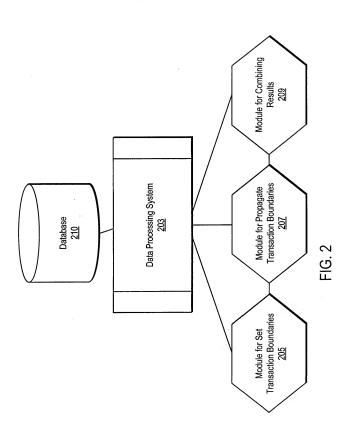
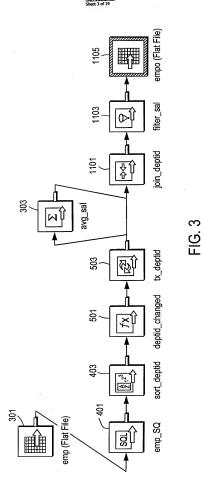


FIG. 1





Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Attv., Docket No.: 23402-08572 Sheet 4 of 19

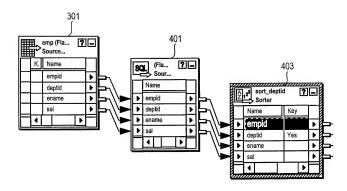


FIG. 4

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Atx. Doddst No.: 23402-08572 Sheet 5 or 19

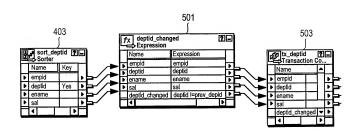


FIG. 5

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Investors: Gautam H. Mudunuri et al. Attv. Dorket No.: 23402-08572 Sheet 6 of 19

Tran	nsformation	Ports	Propertie	s Metada	ta Exten	sions		_	_						_
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FIG. 6

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudununi et al. Attv. Docket No.: 23402-08572 Sheet 7 of 19

dit Transformations	Add Filming	
	etadata Extensions	
Select transformation: tx_deptid		•
Transformation type: Transaction Cor	trol	
Transformation Attribute	Value	
Transaction Condition	iif (deptid_changed, TC_COMMIT_BEFORE, TC_CONTI	INUE_TRANSACTION)
Tracing Level	Normal	
Transaction Control Condition Transaction Control Expression		
	OK Cancel E	Apply Help

FIG. 7

Itie: Method and System for Set-Oriented Real-Time Dat Processing Based on Transaction Boundaries mentors: Goutam H. Mudunuri et al. https://doi.org/10.1007/set/10.1007/se

dit T	ransforma	tions															×
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3	avg_sal				decimal	10	0		V		avg(s	sal)					Ш
	au <u>l</u> t value:																
			<u> </u>			ОК		Ca	nce	_][A	pply		F	lelp	

FIG. 8

Titie: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Investors: Gautam H. Muutmuri et al. Atty. Docket No.: 23402-08572 Sheet 9 of 19

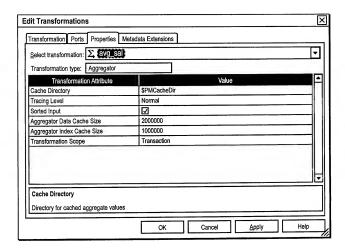


FIG. 9

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Attv. Docket No.: 23402-08572 Shoet 10 of 19

Value					
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FIG. 10

Itis: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Investing: Gautam H. Mudanuri et al. Atty, Dodset No; 29402-08572 Sheet 11 of 19

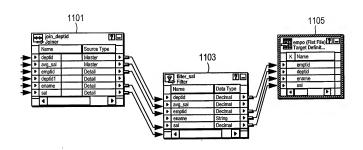


FIG. 11

Titie: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. 4ttv. <u>Docket No.</u>: 23402-08572 Sheet 12 of 19

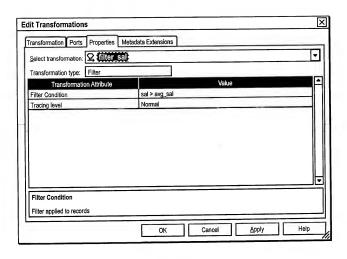


FIG. 12

Title: Method and System for Set-Oriented Real-Tim Data Processing Based on Transaction Boundaries Inventors: Sautam H. Mudunuri et al. MXV_Docket No.: 23402-08572

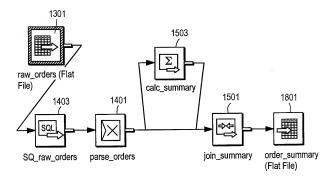


FIG. 13

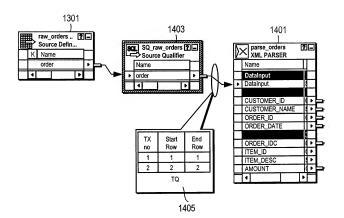


FIG. 14

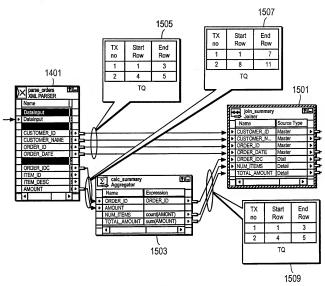


FIG. 15

Title: Method and System for Set-Oriented Real-Tim Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Atty, Docket No.: 23402-08572 heart 16 of 12

Port Attribute Definit
Value
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ing the procedure.

FIG. 16

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Attv. Docket No.: 23402-08572 Sheet 17 of 19

Select transformation: \(\sum_{\text{calc_sur}} \)	nmary	
Transformation type: Aggregator		
Transformation Attribute	Value	
Cache Directory	\$PMCacheDir	
Tracing Level	Verbose Data	
Sorted Input		
Aggregator Data Cache Size	2000000	
Aggregator Index Cache Size	1000000	
Transformation Scope	Transaction	
		- 1
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Cooks Discotors		
Cache Directory		
Directory for cached aggregate values		

FIG. 17

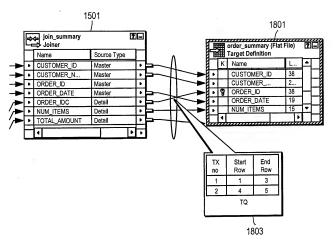


FIG. 18

Title: Method and System for Set-Oriented Real-Time Data Processing Based on Transaction Boundaries Inventors: Gautam H. Mudunuri et al. Atty. Docket No.: 23402-08572 heet 19 of 19

Select transformation: join_summ	lary	
Transformation type: Joiner		_
Transformation Attribute	Value	
Case Sensitive String Comparison		ᆀ
Cache Directory	\$PMCacheDir	ᆀ
Join Condition	ORDER_ID = ORDER_IDC	4
Join Type	Normal Join	ᆀ
Null ordering in master	Null Is Highest Value	41
Null ordering in detail	Null Is Highest value	ᆀ
Tracing Level	Normal	ᆀ
Joiner Data Cache Size	2000000	ᆀ
Joiner Index Cache Size	1000000	ᆀ
Sorted Input	☑ ·	ЦΙ
Transformation Scope	Transaction	4
][
Case Sensitive String Comparison		

FIG. 19